Page 14, line 10, change "ect." to - etc. --;

Page 17, line 5, change "detects" to – employs – ;

Page 19, line 22, after the word "light" insert – (RAS includes both PLS and inellastically-scattered light) -- ;

Page 25, line 5, change "grams" to – gram --;

## IN THE CLAIMS:

Please amend claims 2, 3, 5, 6, 12, 13, and 15. Attached hereto is a marked-up version of the changes made to the claims. The attached page is captioned "Version with markings to show changes made." The individual amended claims are set out in "clean" form below.

- 2. (Amended) The system for the detection and treatment of unwanted agents of claim 1 wherein said detection system utilizes immunoassays and said immunoassays include antibody based or synthetic-peptide based immunoassays.
- 3. (Amended) The system for the detection and treatment of unwanted agents of claim 1 wherein said detection system utilizes nucleic-acid-based assays and said nucleic-acid-based assays include polymerase chain reaction immunoassays.
- 5. (Amended) The system for the detection and treatment of unwanted agents of claim 1 wherein said detection system utilizes a plurality of assays and

said detection system utilizes a plurality of assays include antibody based or synthetic-peptide based immunoassays, nucleic-acid-based assays and said antibody based or synthetic-peptide based immunoassays, nucleic-acid-based assays include polymerase chain reaction immunoassays, and mass-spectrometric-based assays.

- 6. (Amended) The system for the detection and treatment of unwanted agents of claim 1 including a circulation system for circulating said air to said detection system and said treatment system and a control connected to said treatment system and said circulation system for inactivating said circulation system if said treatment system shuts down prematurely.
- 12. (Amended) The apparatus of claim 11 wherein said autonomous chemical and pathogen detector utilizes immunoassays and said immunoassays include antibody based or synthetic-peptide based immunoassays.
- 13. (Amended) The apparatus of claim 11 wherein said autonomous chemical and pathogen detector utilizes nucleic-acid-based assays and said nucleic-acid-based assays include the polymerase chain reaction.
- 15. (Amended) The apparatus of claim 11 wherein said autonomous chemical and pathogen detector utilizes a plurality of assays and said plurality of assays include antibody based or synthetic-peptide based immunoassays, nucleic-acid-based assays and said antibody based or synthetic-peptide based immunoassays, nucleic-acid-based assays include the polymerase chain reaction immunoassays, and mass-spectrometric-based assays.